



United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201

ENVIRONMENTAL ASSESSMENT
EA# NM-060-01-111

WELL NAME & NO.: Bluitt "8" Federal #2
Serial #: NM-100871
Section 8, T. 8 S., R. 37 E., N.M.P.M.
685' FSL & 835' FEL, Unit Letter P

Roosevelt County, New Mexico

OPERATOR: OGS Operating Company, Inc.

ACTION: Application for Permit to Drill

SURFACE/MINERAL ESTATE: Federal Minerals/Private Surface

I. INTRODUCTION

A. Need for the Proposed Action:

OGS Operating Company, Inc. proposes to drill and complete a **natural gas** well at the above described location. The proposed action is needed to develop the mineral lease.

B. Conformance with Land Use Plan:

Oil and gas leasing and development is addressed in the Roswell Resource Area Proposed Resource Management Plan/Final Environmental Impact Statement, January 1997, and is in conformance with the Roswell Approved Resource Management Plan and Record of Decision, October 1997.

C. Relationship to Statutes, Regulations, or other Plans:

1. The proposed action does not conflict with any known State or local planning, ordinance or zoning.

II. Proposed Action and Alternatives

A. Proposed Action-Background Information

OGS Operating Company, Inc. submitted an Application for Permit to Drill on 4/19, 2001, to drill the Bluitt "8" Federal #2 gas well. The proposed action would include:

1. The proposed road is approximately 1722 feet in length beginning from State Highway 262 to the proposed well pad. Of the 1722 feet, a total of 528 feet of existing road and 1194 feet of new access road construction, would cross private lands. The road would have a driving surface (travelway) of 14 feet, with a maximum 30-foot wide surface disturbance area for the road construction. The proposed access road would be constructed and maintained in accordance with the New Mexico Road Policy.

The construction of approximately 1194 feet of new access road would begin from an existing road and would access the southeast corner of the proposed well pad. All other existing access roads would be maintained in as good or better condition than were existing at the commencement of operations. A gate would be constructed and installed at the fence crossing in Sec. 8 - T. 8 S. - R. 37 E. (See Exhibit A).

2. The construction of the proposed well pad would be 240 feet long by 205 feet wide. The reserve pit would be constructed on the northeast corner of the well pad within the 240' X 205' well pad area and dug 4 feet below ground level. The proposed well pad was reduced in size and rotated to align the well in such a position as to avoid the existing pipelines that are surrounding the well pad. Standard oilfield construction equipment consisting of; track-type tractors, motor graders, dump trucks, and water trucks would be used to construct the access road and well pad. A rotary drilling rig would be used to drill the well to a depth of 4825 feet. Associated production facilities (e.g., pipeline, separator, storage tanks, etc.) would be installed during the production phase of this well. Topsoil would be stockpiled for future use over the disturbed areas.

3. Surfacing material (caliche/gravel) needed for the construction of the access road and well pad could be obtained by the operator from a FEDERAL pit in Section 13 - T. 8 S. - R.37 E., Roosevelt County, New Mexico.

4. Construction activities would be conducted outside of the period of March 15th through June 15th to protect the lesser prairie chicken habitat.

B. Alternatives:

1.) Relocate the Proposed Action:

The well location is determined on the basis of subsurface geologic information and by the New Mexico Oil Conservation District II, imposed spacing regulations. No other alternative location would have significantly fewer impacts than, or have a clear advantage over, the proposed location. Therefore, the alternative of changing the location involved in this action is not analyzed further in this EA.

2.) No Action:

Under this alternative, the application would be rejected. None of the environmental impacts associated with the proposed action or alternate location would occur. Additionally, economic benefits of the proposed action would not be realized, and the existing environment, including the developments in place, would remain unchanged.

III. Description of the Affected Environment

A. General Setting:

The proposed access road and well pad are located on federal minerals and private surface, about 12 miles east of Milnesand, N.M.. This area is known as the sand country of the Roswell Field Office, comprised of very sandy soils and a unique vegetative community referred to as the shinnery oak/tall grass community. The mean annual precipitation is 13 to 14 inches. Historical and present use of the subject lands have been limited to livestock grazing and energy development. The proposed action is adjacent to the New Mexico Department of Game and Fish North Bluff Prairie Chicken Management Area.

B. Rights of Record:

An inspection of the Master Title Plats and other Bureau records revealed the following title information pertaining to valid existing prior rights on the subject lands:

- Oil and gas leases: NM-100871 - covers lease actions.
- No federally administered rights-of-way will be affected in the project area.
- No mining claims are recorded within Sec. 8, T. 8 S., R. 37 E., N.M.P.M.

C. Affected Resources:

The following critical resources have been evaluated and are either not present or are not affected by the proposed action or the alternatives in this EA:

Areas of Critical Environmental Concern (ACEC's)
Cultural Resources (01-R-047-A)
Farmlands, Prime/Unique
Floodplains
Native American Religious Concerns
Minority or Low-income Populations or Communities
Threatened or Endangered Species (Plants & Animals)
Wastes, Hazardous/Solid
Wetlands and Riparian Zones
Wild & Scenic Rivers
Wilderness

1. Air Quality:

The area of the proposed actions is considered Class II air quality area. A Class II area allows a moderate amount of degradation of air quality. The primary sources of air pollution are dust from blowing wind on disturbed or exposed soils and exhaust emissions from motorized equipment.

2. Soils:

The proposed action would occur in an area of shallow, well drained soils on uplands referred to as Brownfield fine sand as described in the Soil Survey of Roosevelt County, New Mexico (Page 10, 11, 26, & 36 and map #194). Permeability of Brownfield soils is moderate, runoff is slight, and internal drainage is good, and the hazard of wind erosion is severe. The soils are found on 0 to 3 percent slopes.

3. Vegetation:

The native vegetation in the area is composed of mainly tall and mid grasses, shrubs, and forbs, such as, little bluestem, sideoats grama, sand bluestem, yellow indiagrass, switchgrass, New Mexico feathergrass, needle-and thread, sand dropseed, black grama, hairy grama, sand sagebrush, small soapweed, and shinnery oak.

4. Invasive & Noxious Weeds:

There are no known populations of noxious or invasive weed species on the proposed access road and well pad.

However, noxious weeds affect both crops and native plant species in the same way – by out-competing for light, water, and soil nutrients. Noxious weeds cause estimated crop losses of \$2 to \$3 billion annually. These losses are attributed to: (1) Decreased quality of agricultural products due to high levels of competition from noxious weeds; and (2) decreased quantity of agricultural products due to noxious weed infestations.

Further, noxious weeds can negatively affect livestock and dairy producers by making forage unpalatable to livestock, thus decreasing livestock productivity and potentially increasing producers' feed costs. Increased cost to operators are eventually borne by consumers.

5. Ground Water Quality:

Fresh water sources for stock and domestic use are found in unconsolidated sand and gravel deposits of Cretaceous age which occurs primarily in erosion channels cut into the underlying Triassic-age red beds. The aquifer has a saturated thickness in excess of 100 feet in the deepest parts of the channel. The Ogallala may also be a source of small amounts of water in portions of the area. The deepest water encountered is found at a depth of 445 feet in water well used for stock purposes and located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$, of section 5, T. 8 S., R. 37 E., N.M.P.M..

6. Wildlife:

Wildlife species utilizing this area for habitat include mule deer, pronghorn antelope, coyote, fox, rabbits, kangaroo rats, pocket gophers, herpetile species, as well as a variety of songbirds, dove, quail, and raptors.

Special Status Species:

Federal threatened, endangered, and candidate species, as well as, state-listed threatened or endangered species, potentially occurring within the proposed project area are analyzed in this document.

The lesser prairie chicken is found within the shinnery oak/tall grass community type. It is a grassland grouse species native to southeastern New Mexico. It's range includes the states of New Mexico, Oklahoma, Texas and Colorado. The proposed action is adjacent to the New Mexico Department of Game and Fish North Bluff Prairie Chicken Management Area. It's critical mating season is during the months of March through April, with broodrearing occurring through August.

A petition was filed with the U. S. Fish and Wildlife Service (USFWS) to list the lesser prairie chicken (*Tympanuchus pallidicinctus*) as threatened within its historical range. On June 1, 1998 the USFWS announced a finding for the petition. After review of all available scientific and commercial information, the USFWS found that the listing of this species under the Endangered Species Act is warranted but precluded by other higher priority actions. In view of the findings, the lesser prairie chicken was added to the Service's candidate species list.

Candidate species do not receive protection under the Endangered Species Act (ESA) until proposed. However, within the ESA and under BLM policy, the bureau has an obligation to ensure lease actions do not contribute to the need to list the lesser prairie chicken as a T & E species. It is BLM policy to treat candidate species with the same level of protection as listed species.

7. Range: The well is not located on a BLM grazing allotment.

8. VRM/Recreation:

The proposed action is located on private surface. The construction of the access road and well pad will modify the existing visual features of the landscape. Until reclamation of the access road and well pad are accomplished, oil and/or gas field operations may dominate the view of the landscape. Recreation in the vicinity includes seasonal hunting.

9. Cave/Karst:

No surface cave/karst features were observed in the immediate vicinity of the proposed actions.

10. Minority or Low-income Populations or Communities:

The proposed project would not affect the minority or low-income populations or communities.

IV. ENVIRONMENTAL IMPACTS

A. Proposed Action Impacts:

The surface disturbance involved in the construction of the access road, well pad, and reserve pit would total about 1.9 acres of private surface.

1. Air Quality:

Air quality would temporary be impacted with pollution from exhaust emissions, chemical odors, and dust that would be caused by the motorized equipment used to construct the access road, well pad, and by the drilling rig that will be used to drill the well. Dust dissemination would discontinue upon completion of the construction phase of the road and well pad. The completion of the drilling phase of the operations would drastically reduce the air pollution from the motorized equipment. The winds that frequent the southeastern part of New Mexico generally help in dispersing the odors and emissions. The impacts to the air quality would be greatly reduced as the operational phases of doing business in the gas field are completed.

2. Soils:

The construction of the access road and well pad would physically disturb about 1.9 acres of topsoil material and vegetation. Construction of the reserve pit would affect deeper soil horizons because of the proposed 4-foot depth of the pit. The exposed soils would be susceptible to wind blowing and water erosion. Surfacing the exposed areas would minimize the impacts to the soil. The impact would be remedied upon reclamation when the stockpiled soil would be spread over the disturbed areas to establish a seed bed.

The access road would be impacted when heavy precipitation causes water erosion damage. When water saturated segment(s) on the access road become impassable, vehicles may still be driven over the road. Consequently, deep tire ruts would develop. Where impassable segments are created from deep rutting, unauthorized drive-arounds may occur outside the designated access road. This creates additional soil impacts associated with lease development. Road construction requirements would alleviate potential impacts to the access road from water erosion damage.

3. Vegetation:

The construction of the access road and well pad would remove about 1.9 acres of native vegetation. Vegetation recovery on the access road and well pad would depend on the life of the well. If drilled as a dry hole and plugged, reclamation of the access road and well pad would immediately follow. Vegetation impacts would be short-term with the site re-vegetating in a few years, if the surfacing material (caliche) is hauled off or ripped and re-seeded. If it is a producing well, reclamation would not commence until the well is a depleted producer and plugged and abandoned. Native vegetation would encroach on the access road and well pad over time with only high traffic areas remaining unvegetated.

4. Invasive & Noxious Weeds:

The construction of an access road and/or well pad may unintentionally contribute to the establishment and spread of noxious weeds. Noxious weed seeds could be carried onto the project areas by construction equipment, the drilling rig, and transport vehicles. The main mechanism for seed dispersion on the access roads and well pads is by equipment and vehicles that were previously used and/or driven over noxious weed infested areas. The potential for the dissemination of invasive and noxious weed seeds may be elevated by the use of construction equipment typically contracted out to companies that may be from other geographic areas in the region. Washing and decontaminating the equipment prior to transporting the equipment onto the construction areas would minimize this impact.

Infestations of noxious weeds can have a potentially disastrous impact on biodiversity and natural ecosystems. In order to combat the negative effects of noxious weeds on crop lands, grazing lands and waterways, herbicidal and other weed control strategies can be implemented at further costs to the operators and government agencies. Such costs would then likely be passed down to consumers, who would pay more for products due to increased costs.

5. Ground Water Quality:

The use of a plastic-lined reserve pit would reduce or eliminate seepage of drilling fluid into the soil and eventually reaching groundwater. Spills or produced fluids (e.g., saltwater, oil, and/or condensate in the event of a breach, overflow, or spill from storage tanks) could result in contamination of the soils onsite, or offsite, and may potentially impact groundwater resources

in the long term. The casing and cementing requirements imposed on the proposed well would reduce or eliminate the potential for groundwater contamination from subsurface sources.

6. Wildlife:

Some small wildlife species may be killed and their dens or nests destroyed during construction of the well. The construction of the access road and well pad could cause fragmentation of wildlife habitat. The short term negative impact to wildlife would occur during the construction phase of the operation due to noise and habitat destruction. In general, most wildlife species would become habituated to the new facilities. For other wildlife species with a low tolerance to activities, the site would continue to displace wildlife from the area due to ongoing disturbances such as vehicle traffic and equipment maintenance. The conditions of approval would alleviate most losses of wildlife species, such as fencing off reserve pits, netting storage tanks, installation or other modifications of cones on separator stacks, and timing stipulations. Upon abandonment of the well, the area would revegetate and wildlife would return to previous levels.

Special Status Species:

The proposed action may negatively impact the lesser prairie chicken which is known to occur in the area. The impact from the construction of the well pad and road within the lesser prairie chickens occupied range is the loss of habitat. The lesser prairie chicken would be impacted by the proposed action if construction and drilling operations were allowed during the booming season, due to high noise levels produced by motors or engines. High noise levels and human activity would cause the birds to move away from booming grounds and nesting habitat in the area to avoid the disturbances. Seasonal drilling and operation requirements would minimize the impact to the lesser prairie chicken.

The proposed action is adjacent to the New Mexico Department of Game and Fish North Bluff Prairie Chicken Management Area which support several booming grounds and nesting habitat. Through communication with the NMDGF about the proposed project and location, the NMDGF concluded that the proposed project may negatively impact the lesser prairie chicken (*Tympanuchus pallidicinctus*) unless seasonal restrictions are applied to the project

7. Range: Even though the well pad is on private surface, there would be some minor disruption of livestock grazing in the pasture, during the construction and drilling phase of the well.

8. VRM/Recreation:

The construction of the access road and well pad would slightly modify the existing visual features of the landscape due to other oil and gas facilities currently in place. Until reclamation of the access road and well pad are accomplished, oil and/or gas field operations may dominate the view of the landscape.

9. Cave/karst: There would be no impact to known cave entrances, or karst features within the project area.

10. Minority or Low-income Populations or Communities: The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated.

B. Alternatives:

1. Relocation Alternative:

The alternative of changing the location involved in this action was not analyzed further because no other alternative location would have significantly fewer impacts than, or have a clear advantage over, the proposed location.

2. No Action Alternative:

The No Action alternative would constitute denial of the application. None of the identified environmental impacts would occur. There would, however, be an adverse economic impact to the applicant through the denial of the lessee's right to develop the mineral reserves or through increased costs of accessing those mineral reserves through other means.

C. Mitigation:

The Roswell Field Office; Well Drilling Requirements (Exhibit B), Conditions of Approval (Exhibit C), Permanent Resource Road Requirements (Exhibit D) and the special requirements derived from this EA, would be applied to this proposed action to minimize the surface disturbance and conserve the surrounding landscape.

D. Cumulative Impacts:

While it is likely that there will be no significant cumulative impact from the proposed action, continued oil and gas development, and other surface-disturbing activities in this area, may potentially have negative cumulative impacts on vegetation, soil, water, livestock, and wildlife.

V. Consultation and Coordination

An onsite inspection was conducted on the access road and well pad on May 10, 2001. In attendance were Mr. Lonnie Reddell, Pumper Operator for OGS Operating Company, Inc., and Richard Hill, Environmental Protection Specialist, BLM Roswell Field Office. Coordination and consultation has occurred with the applicant's agent. The comments and suggestions expressed during the onsite consultation have been incorporated into this EA.

Coordination and consultation has occurred with Roswell Field Office staff specialist. The comments and suggestions expressed during the review of the proposed action and environmental assessment have been incorporated into this EA.

Reviewed by:


Irene Gonzales Salas, Reality Specialist


DATE

**FINDING OF NO SIGNIFICANT IMPACT
AND DECISION RECORD
EA-NM-060-01-111**

DECISION: It is my decision to authorize the Application For Permit To Drill Or Deepen (APD), for the **Bluitt "8" Federal #2** gas well, submitted by **OGS Operating Company, Inc.**. The provisions for the approval of the APD will include the attachment of the Roswell Field Office requirements as defined in the following exhibits; **Exhibit A** - Location Map, **Exhibit B** - Well Drilling Requirements, **Exhibit C** - Conditions of Approval, **Exhibit D** - Permanent Resource Road Requirements, and special mitigating measures developed in the environmental assessment.

In the event the well proves to be a dry hole, or when the well is abandoned, I recommend that reclamation requirements be attached to the well abandonment, including additional requirements imperative for the complete reclamation of the disturbed areas. These actions are subject to 43 CFR 3160 regulations for Onshore Oil and Gas operations on federal lease NM-100871.

Authority for these actions is the Mineral Leasing Act of February 25, 1920, as amended.

These actions will affect public lands described as:


New Mexico Principal Meridian

Section 8; SE¼SE¼, T. 8 S., R. 37 E.
685' FSL & 835' FEL

FINDING OF NO SIGNIFICANT IMPACT: Based on the analysis of potential environmental impacts contained in the attached environmental assessment, I have determined that impacts resulting from the proposed actions are not expected to be significant and an environmental impact statement is not required.

RATIONALE FOR DECISION: The proposed actions would not result in any undue or unnecessary environmental degradation. Portions of the subject lands and adjacent lands have been used for similar purposes and all present and potential uses and users have been considered.

COMPLIANCE AND MONITORING: The construction phase of the proposed actions and subsequent operational phases will be monitored as per regulations.


for **Larry D. Bray, Assistant Field Manager,**
Lands and Minerals

8/29/01
Date